

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-75. (canceled)

76. (currently amended) A method for ~~retrieving~~ prefetching data for a set of objects ~~prior to an explicit request for access to the data~~, each object in the set comprising a plurality of attributes, the method comprising:

prior to receiving a query, creating a structure context description that ~~describes the~~ identifies each object in the set of objects, whereby the structure context description reduces time required to process the query after the query is received;

associating the structure context description with each object in the set of objects;

receiving from an application ~~a request for~~ the query that requests data corresponding to a first attribute of a first object in the set of objects; and

in response to receiving the query request:

retrieving data corresponding to the first attribute of the first object;

returning the data corresponding to the first attribute of the first object to the application;

using the structure context description to identify data corresponding to the first attribute of other objects in the set of objects;

retrieving the data corresponding to the first attribute of the other objects in the set of objects; and

placing in cache the data corresponding to the first attribute of the other objects in the set of objects for future use.

77. (previously presented) The method of claim 76, further comprising storing the structure context description in at least one member of a group comprising memory of a client application program, memory allocated to a data storage system, and a table of a relational database.

78. (previously presented) The method of claim 76, comprising retrieving by an object repository the data corresponding to the first attribute of the other objects in the set of objects.

79. (currently amended) A computer-readable medium having stored thereon computer-executable instructions for performing steps comprising:

prior to receiving a query, creating a structure context description that ~~describes a~~ identifies each object in a set of objects, whereby the structure context description reduces time required to process the query after the query is received;

associating the structure context description with each object in the set of objects;

receiving from an application ~~a request for the query that requests~~ data corresponding to a first attribute of a first object in the set of objects; and

in response to receiving the query request:

retrieving data corresponding to the first attribute of the first object;

returning the data corresponding to the first attribute of the first object to the application;

using the structure context description to identify data corresponding to the first attribute of other objects in the set of objects;

retrieving the data corresponding to the first attribute of the other objects in the set of objects; and

placing in cache the data corresponding to the first attribute of the other objects in the set of objects for future use.

80. (previously presented) The computer-readable medium of claim 79, having stored thereon further computer-executable instructions for storing the structure context description in at least one member of a group comprising memory of a client application program, memory allocated to a data storage system, and a table of a relational database.

81. (previously presented) The computer-readable medium of claim 79, wherein the computer-executable instructions for retrieving the data corresponding to the first attribute of the other objects in the set of objects comprise computer-executable instructions for

retrieving by an object repository the data corresponding to the first attribute of the other objects in the set of objects.

82. (currently amended) A system for ~~retrieving~~ prefetching data for a set of objects ~~prior to an explicit request for access to the data~~, each object in the set comprising a plurality of attributes, the system comprising:

- a processor operative to execute computer executable instructions; and
- memory having stored therein computer executable instructions for

performing the following steps:

- prior to receiving a query, creating a structure context description that ~~describes the~~ identifies each object in the set of objects, whereby the structure context description reduces time required to process the query after the query is received;

- associating the structure context description with each object in the set of objects;

- receiving from an application ~~a request for~~ the query that requests data corresponding to a first attribute of a first object in the set of objects; and

- in response to receiving the query ~~request~~:

- retrieving data corresponding to the first attribute of the first object;

- returning the data corresponding to the first attribute of the first object to the application;

- using the structure context description to identify data corresponding to the first attribute of other objects in the set of objects;

- retrieving the data corresponding to the first attribute of the other objects in the set of objects; and

- placing in cache the data corresponding to the first attribute of the other objects in the set of objects for future use.

83. (previously presented) The system of claim 82, wherein the structure context description is stored in at least one member of a group comprising memory of a client

application program, memory allocated to a data storage system, and a table of a relational database.

84. (previously presented) The system of claim 82, further comprising an object repository for retrieving the data corresponding to the first attribute of the other objects in the set of objects.

85. (currently amended) A method for ~~retrieving~~ prefetching data for an object ~~prior to an explicit request for access to the data~~, the object comprising a plurality of attributes, the method comprising:

prior to receiving a query, creating a structure context description that ~~describes~~ identifies each attribute in the object, whereby the structure context description reduces time required to process the query after the query is received;

associating the structure context description with the object;

receiving from an application ~~a request for the query that requests~~ data corresponding to a first attribute of the first object; and

in response to receiving the query request:

retrieving data corresponding to the first attribute of the object;

returning the data corresponding to the first attribute of the object to the application;

using the structure context description to identify data corresponding to other attributes of the object;

retrieving the data corresponding to all other attributes of the object; and

placing in cache the data corresponding to other attributes of the object for future use.

86. (previously presented) The method of claim 85, further comprising storing the structure context description in at least one member of a group comprising memory of a client application program, memory allocated to a data storage system, and a table of a relational database.

87. (previously presented) The method of claim 85, comprising retrieving by an object repository the data corresponding to other attributes of the object.

88. (currently amended) A computer-readable medium having stored thereon computer-executable instructions for performing steps comprising:

prior to receiving a query, creating a structure context description that ~~describes~~ identifies each attribute in an object, whereby the structure context description reduces time required to process the query after the query is received;

associating the structure context description with the object;

receiving from an application ~~a request for~~ the query that requests data corresponding to a first attribute of the first object; and

in response to receiving the query request:

retrieving data corresponding to the first attribute of the object;

returning the data corresponding to the first attribute of the object to the application;

using the structure context description to identify data corresponding to other attributes of the object;

retrieving the data corresponding to all other attributes of the object; and

placing in cache the data corresponding to other attributes of the object for future use.

89. (previously presented) The computer-readable medium of claim 88, having stored thereon further computer-executable instructions for storing the structure context description in at least one member of a group comprising memory of a client application program, memory allocated to a data storage system, and a table of a relational database.

90. (previously presented) The computer-readable medium of claim 88, wherein the computer-executable instructions for retrieving the data corresponding to other attributes of the object comprise retrieving by an object repository the data corresponding to other attributes of the object.

91. (currently amended) A system for ~~retrieving~~ prefetching data for an object ~~prior to an explicit request for access to the data, each~~ the object in the set comprising a plurality of attributes, the system comprising:

a processor operative to execute computer executable instructions; and

memory having stored therein computer executable instructions for

performing the following steps:

prior to receiving a query, creating a structure context description that describes identifies each attribute in the object, whereby the structure context description reduces time required to process the query after the query is received;

associating the structure context description with the object;

receiving from an application ~~a request for~~ the query that requests data corresponding to a first attribute of the first object; and

in response to receiving the query request:

retrieving data corresponding to the first attribute of the object;

returning the data corresponding to the first attribute of the object to the application;

using the structure context description to identify data corresponding to other attributes of the object;

retrieving the data corresponding to all other attributes of the object; and

placing in cache the data corresponding to other attributes of the object for future use.

92. (previously presented) The system of claim 91, wherein the structure context description is stored in at least one member of a group comprising memory of a client application program, memory allocated to a data storage system, and a table of a relational database.

93. (previously presented) The system of claim 91, further comprising an object repository for retrieving the data corresponding to other attributes of the object.